Amendments To The Claims:

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. No claims are currently amended but are listed below for completeness.

Listing of Claims:

1. (previously presented) A method for training a subject for control processes in a task, comprising: decomposing the task into a plurality of cognitive skills related to the control processes; determining a training strategy according to said plurality of cognitive skills; and constructing a trainer, said trainer comprising software operated by a computer for training the subject according to said training strategy, wherein operation of said trainer does not require any physical fidelity to the task, wherein the control process is selected from the group consisting of one or more of executive or attention control processes.

2. (Previously presented) The method of claim 1, wherein said trainer uses at least one physical action being different from an actual physical action performed by the subject when performing the task.

3. (Previously presented) The method of claim 1, wherein said decomposing the task into said plurality of cognitive skills further comprises: decomposing the task into a plurality of actions; and mapping said plurality of actions to said plurality of cognitive skills.

4. (Previously presented) The method of claim 3, wherein said mapping further comprises: analyzing said plurality of actions to determine a plurality of cognitive actions, wherein said cognitive actions are mapped to said plurality of cognitive skills.

5. (Previously presented) The method of claim 1, wherein said determining said training strategy comprises: associating each cognitive skill with at least one action to be performed by the subject.

6. (Previously presented) The method of claim 5, wherein said action in said training strategy further comprises a physical action and a cognitive action, wherein said physical action does not require complete physical fidelity to the task.

7. (Previously presented) The method of claim 6, wherein said determining said training strategy further comprises: coordinating a plurality of actions associated with said cognitive skills.

8. (Previously presented) The method of claim 7, wherein said determining said training strategy further comprises: iteratively adjusting said plurality of actions for said training strategy for said coordinating.

9. (Previously presented) The method of claim 8, wherein said iteratively adjusting said plurality of actions is performed according to at least one heuristic parameter.

10. (Previously presented) The method of claim 5, wherein said determining said training strategy further comprises: determining a sequence of actions to be performed by the subject for training each cognitive skill.

11. (Previously presented) The method of claim 5, wherein said determining said training strategy further comprises: determining a sequence of actions to be performed by the subject for training a plurality of cognitive skills in combination.

12. (Previously presented) The method of claim 1, wherein said determining said training strategy comprises determining at least one action to be performed by the subject and wherein said constructing said trainer comprises: selecting at least one input device and at least one output device for operation by the subject according to said at least one action to be performed by the subject.

13. (Previously presented) The method of claim 1, wherein said decomposing the task further comprises: determining a plurality of basic skills related to the task; and combining these basic skills into a profile for training the subject.

14. (Previously presented) A method for training a subject for control processes in a task, comprising: designing a cognitive simulator for training the subject in the task; constructing a trainer for training the subject according to said cognitive simulator, said trainer comprising software operated by a computer; and determining a training plan for training the subject with said trainer, wherein the control process is selected from the group consisting of one or more of executive or attention control processes.

15. (Previously presented) The method of claim 14, wherein said designing said cognitive simulator comprises: modeling the task to form a model; and designing said cognitive simulator according to said model.

16. (Previously presented) A system for training a subject in at least one control process associated with a task, comprising: (a) at least one input device and at least one output device for interacting with the subject, wherein operation of said at least one input device and said at least one output device does not require complete physical fidelity to the task; (b) a training module for controlling said at least one input device and said at least one output device for training said at least one cognitive skill, said trainer comprising software operated by a computer for training the subject according to said training strategy, wherein operation of said trainer does not require any physical fidelity to the task, wherein the control process is selected from the group consisting of one or more of executive or attention control processes; and (c) an analyzer for analyzing interactions of the subject with said at least one input device and said at least one output device and for adjusting said operation of said at least one input device and said at least one output device according to said interactions of the subject, thereby training the subject in the at least one cognitive skill.

17. (Previously presented) A system for training a subject in at least one control process associated with a task, comprising: (a) at least one input device and at least one output device for interacting with the subject, wherein operation of said at least one input device and said at least one output device does not require complete physical fidelity to the task; (b) a training module for controlling said at least one input device and said at least one output device for training said at least one cognitive skill; and (c) an analyzer for analyzing interactions of the subject with said at least one input device and said at least one output device and for adjusting said operation of said at least one input device and said at least one output device according to said interactions of the subject, thereby training the subject in the at least one cognitive skill.

18. (Previously presented) A method for training a subject in a plurality of cognitive skills for a task, comprising: mapping a plurality of actions associated with the task into the plurality of cognitive skills; determining a training strategy according to said plurality of cognitive skills; and constructing a trainer for training the subject according to said training strategy, wherein operation of said trainer does not require physical fidelity to the task.

19. (Previously presented) The method of claim 18, wherein the task comprises a sport-related object-handling activity.

20. (Previously presented) The method of claim 19, wherein said object-handling activity comprises a ball-handling activity.

21.(Previously presented) A trainer for training a subject in a plurality of cognitive skills related to control processes for a task, comprising: at least one input device and at least one output device for interacting with the subject; and a control module for controlling interactions of said at least one input device and said at least one output device with the subject, wherein said control module is designed to simulate cognitive actions related to the plurality of cognitive skills for training the subject, wherein the control process is

selected from the group consisting of one or more of executive or attention control processes.

22. (Previously presented) A method for training a subject in a control process for a task, comprising: mapping a plurality of cognitive skills into the control process; mapping a plurality of actions associated with the task into the plurality of cognitive skills; determining a training strategy according to said plurality of cognitive skills; and constructing a trainer for training the subject according to said training strategy, wherein operation of said trainer does not require physical fidelity to the task.

23. (Previously presented) The method of claim 4, wherein said mapping is performed automatically.

24. (Previously presented) The method of claim 1, further comprising determining a training plan for training the subject with said trainer.

25. (Previously presented) The method of claim 24, wherein said determining said training plan further comprises associating at least one parameter for operation of said trainer by the subject with at least one task-related skill or situation.

26. (Previously presented) The method of claim 25, wherein said determining said training plan further comprises assigning a weight to said at least one parameter.

27. (Previously presented) The method of claim 25, wherein said determining said training plan further comprises mapping said at least one parameter to an interaction of the subject with said trainer.

28. (Previously presented) The method of claim 27, wherein said constructing said trainer comprises: selecting at least one input device and at least one output device for operation by the subject according to said cognitive simulator.

29. (Previously presented) The method of claim 28, further comprising: calibrating an operation of said trainer during interactions with the subject.

30. (Previously presented) The method of claim 1, wherein the task comprises a sport-related activity.

31. (Previously presented) The method of claim 30, wherein said sport-related activity comprises an object-handling activity.

32. (Previously presented) The method of claim 31, wherein said object-handling activity comprises a ball-handling activity.

33. (Previously presented) The method of claim 30, wherein said sport-related activity comprises an activity of at least one of basketball, baseball, soccer, American football, ice hockey, field hockey, rugby, lacrosse, cricket, golf, tennis, table tennis, volleyball, car racing, motorcycle racing, bicycle racing, polo, boxing, skiing, snowboarding, fencing, windsurfing, sailing, kite surfing, and hang gliding.

34. (Previously presented) The method claim 33, wherein said sport-related activity comprises a martial art activity of at least one of wrestling, judo, karate, sumo, jujitsu, kick boxing, aikido, taekwondo, and kung-fu.

35. (Previously presented) The method of claim 34, wherein said sport-related activity comprises an activity performed by a plurality of subjects collectively in a team, and wherein at least one cognitive skill is related to performance by a subject as part of said team.

36. (Previously presented) The method of claim 1, wherein said determining said training strategy further comprises characterizing the subject.

37. (Previously presented) The method of claim 4, wherein said cognitive skill comprises at least one of location perception, motion perception, prediction of future location and perception of distance.

38. (Previously presented) The method of claim 37, wherein the task comprises basketball and said perception of distance comprises perception of distance from a basket.

39. (Previously presented) The method of claim 38, wherein said cognitive skill further comprises perception of a free team-mate.

40. (Previously presented) The method of claim 37, wherein said cognitive skill further comprises a skill for a motor schema.

41. (Previously presented) The method of claim 37, wherein said cognitive skill further comprises a skill for game tactics.

42. (Previously presented) The method of claim 14, wherein said determining said training plan comprises: providing a plurality of cognitive building components; and composing said training plan from said plurality of cognitive building components.

43. (Previously presented) The method of claim 14, further comprising: decomposing the task into a plurality of cognitive skills for control processes before said designing said cognitive simulator, such that said designing is performed according to said plurality of cognitive skills.

44. (Previously presented) The method of claim 43, wherein said decomposing the task into said plurality of cognitive skills further comprises: decomposing the task into a plurality of actions; and mapping said plurality of actions to said plurality of cognitive skills.

45. (Previously presented) The method of claim 44, wherein said mapping is performed at least semi-automatically.

46. (Previously presented) The system of claim 17, further comprising: a stimuli generator for designing a stimulus for training the subject.

47. (Previously presented) The system of claim 46, wherein said stimuli generator further comprises a stimuli editor for data entry and a stimuli analyzer for analyzing a new stimulus according to at least one parameter for difficulty.

48. (Previously presented) A method for training a subject for cognitive_control processes in a task, comprising: decomposing the task into a plurality of cognitive skills related to the cognitive control processes; determining a training strategy according to said plurality of cognitive skills; and constructing a trainer for training the subject according to said training strategy, said trainer comprising software operated by a computer, wherein operation of said trainer does not require complete physical fidelity to the task,_wherein training the subject comprises training the cognitive control processes and wherein the control process is selected from the group_consisting of one or more of executive or attention control processes,_and automatically change the extent to which each such control process is trained.

49. (Previously presented) A method for training a subject for cognitive control processes in a task, comprising: designing a cognitive simulator for training the subject in the task, wherein said designing said cognitive simulator comprises automatically generating training for cognitive control processes; constructing a trainer for training

the subject according to said cognitive simulator, said trainer comprising software operated by a computer; and determining a training plan for training the subject with said trainer, wherein the control process is selected from the group consisting of one or more of executive or attention control processes,

50. (Previously presented) A system for training a subject in at least one cognitive control process associated with a task , comprising: (a) at least one input device and at least one output device for interacting with the subject, wherein operation of said at least one input device and said at least one output device does not require complete physical fidelity to the task; (b) a training module for controlling said at least one input device and said at least one output device for training said at least one cognitive skill; and (c) an analyzer for analyzing interactions of the subject with said at least one input device and said at least one output device and for adjusting said operation of said at least one input device and said at least one output device according to said interactions of the subject, thereby training the subject in the at least one cognitive skill; wherein said system comprises automatically generating training for cognitive control processes.

51. (Previously presented) A trainer for training a subject in a plurality of cognitive skills related to control processes for a task, comprising: at least one input device and at least one output device for interacting with the subject; and a control module for controlling interactions of said at least one input device and said at least one output device with the subject, wherein said control module is designed to simulate cognitive actions related to the plurality of cognitive skills for training the subject; wherein said trainer comprises automatically generating training for cognitive control processes.

52. (Previously presented) A method for training a subject in a cognitive control process for a task, comprising; mapping a plurality of actions associated with the task into the plurality of cognitive skills; determining a training strategy according to said plurality of cognitive skills; and constructing a trainer for training the subject according to said

training strategy, wherein operation of said trainer does not require physical fidelity to the task and wherein training the subject comprises training the cognitive control processes.